

April 18, 2007

TO: D. Morris

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SUBJECT: Rosetta mission Supportability Study

The Resource Allocation Planning Service (RAPS) has completed a study to analyze the Rosetta mission supportability. The study encompasses weeks 5 through 6 in 2008.

### **Mission Requirements**

The Rosetta mission requires 70m or 34BWG1 support at Goldstone and Canberra for two 8 hour tracking passes, one in week 5 and one in week 6. This is needed for Rosetta to go into hibernation mode. They are only able to use S band.

### **Summary of Results**

An analysis of forecasted DSN supportability for Rosetta Mission shows that it is fully supportable.

### **Analysis of Results**

Analysis used the updated mission set database from the February 2007 Resource Allocation Review (RAR). The DSN Antenna Downtime Status and Forecast was used to show the downtimes and critical events that affect this study relevant to the Rosetta Mission.

As always, the results of this study are subject to change, in that network loading changes as requirements for planned missions are input and updated and periods of antenna downtime are identified. We will continue to work with the Rosetta mission and other users of the DSN to maximize the time available for each individual user.